



NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov



December 12, 2013

Fargo City Of
Bruce Grubb
200 3rd St N
Fargo, ND 58102

Issuance of an NDPDES Permit

NDPDES Permit No: ND0022870 Name: Fargo City Of

Enclosed is your North Dakota Pollutant Discharge Elimination System (NDPDES) wastewater discharge permit which has been issued to your facility. This letter serves as notice that your facility is covered by and is authorized to discharge wastewater under the conditions as described in the above-referenced permit.

Should you have any questions, please contact Jeff Roerick at 701.328.5240 or the Division of Water Quality-NDPDES Permits Program at 701.328.5210. Note that enclosures are not being sent to carbon copy recipients.

Sincerely,

Karl Rockeman
Environmental Engineer
Division of Water Quality

Enc.

CC: Peter Bilstad, Sewage Works Supt

Environmental Health
Section Chief's Office
701-328-5150

Division of
Air Quality
701-328-5188

Division of
Municipal Facilities
701-328-5211

Division of
Waste Management
701-328-5166

Division of
Water Quality
701-328-5210



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NDPDES Permits Program-Division of Water Quality

Receipt of an NDPDES Permit

NDPDES Permit No: ND0022870 Name: Fargo City Of

Your North Dakota Pollutant Discharge Elimination System (NDPDES) wastewater discharge permit will be in effect on January 01 2014. Please complete this form, make a copy for your records, and return it to us at the address below by January 11 2014

Receipt of an NDPDES Permit

Fargo City Of has received a copy of its NDPDES Permit ND0022870. We are aware that the permit is effective on January 01 2014 and expires on December 31 2018.

Date Received: December 23, 2013

Received By: Bruce P. Grubb

Title: Enterprise Director

Telephone: 701-241-1525

Comments:

Please return the completed form to:

North Dakota Dept of Health
Div of Water Quality Permits Program
918 East Divide Ave
Bismarck ND 58501-1947

For Office Use Only
Route to: Jeff Roerick

Environmental Health
Section Chief's Office
701-328-5150

Division of
Air Quality
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Municipal Facilities
701-328-5211

Division of
Waste Management
701-328-5166

Division of
Water Quality
701-328-5210

Permit No: ND0022870
Effective Date: January 1, 2014
Expiration Date: December 31, 2018

AUTHORIZATION TO DISCHARGE UNDER THE
NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33-16-01 of the North Dakota Department of Health rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

the City of Fargo

is authorized to discharge from outfalls identified on page 6

to the Red River of the North

provided all the conditions of this permit are met.

This permit and the authorization to discharge shall expire at midnight,
December 31, 2018.

Signed this 16 day of December, 2013.



Dennis R. Fewless, Director
Division of Water Quality

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DEFINITIONS Standard Permit

1. **"Act"** means the Clean Water Act.
2. **"Average monthly discharge limitation"** means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
3. **"Average weekly discharge limitation"** means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.
4. **"Best management practices"** (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
5. **"Bypass"** means the intentional diversion of waste streams from any portion of a treatment facility.
6. **"Composite"** sample means a combination of at least four discrete sample aliquots, collected over periodic intervals from the same location, during the operating hours of a facility not to exceed a 24 hour period. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.
7. **"Daily discharge"** means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
8. **"Department"** means the North Dakota Department of Health, Division of Water Quality.
9. **"DMR"** means discharge monitoring report.
10. **"EPA"** means the United States Environmental Protection Agency.
11. **"Geometric mean"** means the nth root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.
12. **"Grab,"** for monitoring requirements, means a single "dip and take" sample collected at a representative point in the discharge stream.
13. **"Instantaneous,"** for monitoring requirements, means a single reading, observation, or measurement. If more than one sample is taken during any calendar day, each result obtained shall be considered.
14. **"Maximum daily discharge limitation"** means the highest allowable "daily discharge."
15. **"Salmonid"** means of, belonging to, or characteristic of the family Salmonidae, which includes the salmon, trout, and whitefish.

16. **"Sanitary Sewer Overflows (SSO)"** means untreated or partially treated sewage overflows from a sanitary sewer collection system.
17. **"Severe property damage"** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
18. **"Total drain"** means the total volume of effluent discharged.
19. **"Upset"** means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

DEFINITIONS Whole Effluent Toxicity (WET) BP 2010.03.24

20. **"Acute toxic unit" ("TUa")** is a measure of acute toxicity. TUa is the reciprocal of the effluent concentration that causes 50 percent of the organisms to die by the end of the acute exposure period (i.e., $100/\text{LC50}$).
21. **"Chronic toxic unit" ("TUc")** is a measure of chronic toxicity. TUc is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period (i.e., $100/\text{NOEC}$).
22. **"Inhibition concentration" ("IC")** is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., Interpolation Method).
23. **"LC50"** means the concentration of toxicant (e.g., effluent) which is lethal to 50 percent of the organisms exposed in the time period prescribed by the test.
24. **"No observed effect concentration" ("NOEC")**, is the highest concentration of toxicant (e.g., effluent) to which organisms are exposed in a chronic toxicity test (full life-cycle or partial life-cycle [short term] test), that causes no observable adverse effects on the test organisms (i.e., the highest concentration of effluent in which the values for the observed responses are not significantly different statistically from the controls).

FACILITY DESCRIPTION

The City of Fargo owns and operates a major municipal wastewater treatment plant which treats all wastewater generated from residential, commercial, and industrial entities in Fargo. In addition, the plant treats wastewater from outside entities such as Reile's Acres, Highland Park, North River, Frontier, Prairie Rose, Briarwood, Oxbow, and the Southeast Cass Sewer District.

The mechanical wastewater plant is a trickling filter system with the capacity to treat an average daily flow of 15 million gallons per day (MGD) of domestic-strength sewage. The peak pumping capacity of the facility is 29 MGD. Treated wastewater from the plant is discharged continuously by gravity flow to the Red River. However, when the river stage reaches 20 feet or higher, the treated water is pumped from the plant to the city's six 90-acre waste water stabilization ponds where it is stored until it can be discharged to the Red River. The lagoons are also used when the water quality does not meet discharge quality standards. Byproducts of the treatment process, primarily grit and biosolids, are hauled to the city landfill for disposal.

OUTFALL DESCRIPTION

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a North Dakota Pollution Discharge Elimination System (NDPDES) permit is a violation of the Clean Water Act (CWA) and could subject the person(s) responsible for such discharges to penalties under Section 309 of the CWA. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within the specified timeframe outlined in this permit could subject such person(s) to criminal penalties as provided under the CWA.

Outfall 006: This is an emergency bypass from the wastewater treatment plant to the Red River of the North (Class I stream). It would be used only in emergency situations, such as an extended power outage flooding of the plant by heavy rainfall/precipitation. Any discharge must be reported under the provisions set forth in 40 CFR 122.41(l)(6). Outfall 006 is located at latitude 46.924744 N and longitude -96.78576 W.

Outfall 007 – Active. Cell #5 of the waste water treatment stabilization ponds. These ponds are located in Sections 10 and 11, Township 140 N, and Range 49 W. The outfall is located at latitude 46.955910 N and longitude -96.803606 W from waste stabilization pond Cell 5. The outfall goes directly to the Red River of the North (class I stream). All other cells except Cell 3 must be transferred into Cell 5 in order to be discharged.

Outfall 009 – Active. Cell #3 of the waste stabilization ponds. These ponds are located in Sections 10 and 11, Township 140 N, and Range 49 W. The outfall is located at latitude 46.962931 N and longitude -96.849261 W from waste stabilization pond Cell 3. The water drains from Cell 3 into an open ditch and into County Drain No. 9 which goes to the Red River of the North (Class I stream).

Outfall 010 – Active. This continuous discharge originates from the mechanical treatment plant located at 3400 North Broadway with the end-of-pipe at latitude 46.925287 N and longitude -96.78585 W. If there is a plant upset which results in the effluent not meeting discharge permit limitations, the city can pump the wastewater to its stabilization ponds. During periods of extremely high-river flows (i.e., flood events > 22'), the plant effluent will be diverted from the primary gravity-fed conveyance to a forced

conveyance (latitude 46.925462 N and longitude -96.78646 W) to compensate for the receiving stream's back pressure from the elevated water levels. This direct discharge to the Red River of the North (class I stream) enters the river upstream of Outfalls 007 and 009.

NOTE: Lift Stations #1, #2, #3, and #4, identified in previous permits as permitted discharge points, have been excluded from this permit. See the "Special Conditions" section on page 8 for monitoring and reporting requirements associated with these lift stations.

PERMIT SUBMITTALS SUMMARY

Coverage Point	Submittal	Submittal Frequency	First Submittal Date
007A and 009A lagoon system	DMR	Monthly	February 1, 2014
007W and 009W	DMR	Monthly	February 1, 2014
007M and 009M	DMR	Annually	February 1, 2015
010A – Mechanical Plant	DMR	Monthly	February 1, 2014
010W Acute Toxicity	DMR	Monthly	February 1, 2014
010M	DMR	Quarterly	April 1, 2014
010W Chronic Toxicity	DMR	Quarterly	April 1, 2014
Pretreatment Report	Report	Annually	March 28, 2014
Application Renewal	NPDES Application Renewal	1/permit cycle	July 31, 2018
Note: The A, M, and W are pollutant designators referring to Conventional (A), Metals (M), and Whole Effluent Toxicity (W).			

SPECIAL CONDITIONS

Mercury Pollutant Minimization Plan

The permittee is required to complete and submit a Mercury Pollutant Minimization Plan (MMP) to the North Dakota Department of Health (department) as detailed in this section. If it has previously submitted a MMP, the permittee must update the MMP and submit it to the department. The purpose of the MMP is to evaluate collection and treatment systems to determine possible sources of mercury as well as potential mercury reduction options. Guidelines for developing a MMP are detailed in this section.

The permittee shall submit a Pollutant Minimization Plan within 180 days of permit issuance. At a minimum, the MMP must include the following:

- a) A summary of mercury influent and effluent concentrations and biosolids monitoring data using the most recent five years of monitoring data, if available.
- b) Identification of existing and potential sources of mercury concentrations and/or loading to the facility. As appropriate for your facility, you should consider residential, institutional, municipal, and commercial sources (such as dental clinics, hospitals, medical clinics, nursing homes, schools, and industries with potential for mercury contributions). You should also consider other influent mercury sources, such as stormwater inputs, ground water inflow and infiltration (I/I) inputs, and waste streams or sewer tributaries to the wastewater treatment facility.
- c) An evaluation of past and present WWTF operations to determine those operating procedures that maximize mercury removal.
- d) A summary of any mercury reduction activities implemented during the last five years.
- e) A plan to implement mercury management and reduction measures during the next five years.

In addition to the sampling required in this permit, the permittee shall sample effluent from the total facility discharge station for dissolved mercury annually throughout the life of this permit. The sampling method is a concurrent grab sample. Dissolved mercury shall be analyzed using an EPA approved mercury analysis method. Samples shall be taken at any time during the calendar year and reported on the custom supplemental form provided by the department. A trip blank shall be analyzed for each sampling event. The custom supplemental form must be submitted with the DMR for the last month the reporting period it was collected.

Reporting, Record Keeping, and Public Notification for Unauthorized Sanitary Sewer Overflows

1. Immediate Reporting

- A. The permittee shall report to the department any sanitary sewer overflow or any unauthorized sanitary sewer overflow that the permittee owns and/or operates. Any information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. At a minimum, the report shall identify the:
 - i. Location of the overflow.
 - ii. Receiving water (if there is one).
 - iii. Duration of the overflow.
 - iv. Estimated volume of the overflow.

B. An overflow is any spill, release, or diversion of municipal sewage, including:

- i. An overflow that results in a discharge to waters of the state; and
- ii. An overflow of wastewater, including wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the state.

2. Written Reports

A. The permittee shall also provide a written report to the department for any overflow identified under paragraph 1 of this section within five (5) days from the time the permittee becomes aware of the circumstances. The written report shall contain a description of:

- i. The location of the overflow.
- ii. The receiving water body (if there is one).
- iii. An estimate of the overflow volume.
- iv. A description of the sewer-system component that caused the release (e.g. manhole, constructed overflow pipe, pipe break, etc.).
- v. The estimated date and time when the overflow began and stopped or will be stopped.
- vi. The cause or suspected cause of the overflow.
- vii. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps.
- viii. If possible, the number of persons who came into contact with wastewater from the overflow.
- ix. Steps taken or planned to mitigate the impact(s) from the overflow and a schedule of major milestones for those steps.

B. The department may waive the written report on a case-by-case basis for reports under paragraph A. of this section if the verbal report required under Part II paragraph 1, has been received within 24 hours.

C. DMRs – the permittee shall report any overflow that is not reported under Part II.1 or 2.A in the DMR required by this permit. The DMR shall contain the information listed in Part II 2.A of this permit.

3. Record Keeping

The permittee must maintain a record of the following information for a period of at least three years from the date of the reported overflow event:

- A. Any report submitted under paragraph 2 above.
- B. Any report, including work orders that are associated with investigation of system problems related to an overflow that (1) describes the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow, or (2) documents system performance.

4. Notice

The department (under 40 CFR 122.41) requires that the permittee shall notify specified parties about overflows that may endanger health. Where the permittee is required to make such notification, the following guidelines can be followed:

- A. The permittee is to develop a plan describing how, under various scenarios, to notify the public and other entities of overflows (and unanticipated bypass and upset) that may endanger health.
- B. This plan should identify all reportable overflows and the specific information reported to each entity receiving notification.
- C. The permittee must immediately notify the public, health agencies, and other affected entities (e.g., public water systems) of any sanitary sewer overflow that the permittee controls.
- D. The permittee shall sample at the SSO location(s) and at any receiving water to identify any potential impacts on the receiving stream. These data must be reported to any downstream users.

5. Proper Operation and Maintenance

The permittee is to implement proper operation and maintenance of the collection system according to 40 CFR 122.41(d) and (e). At the request of the department, this may include the development and implementation of capacity, management, operation, and management (CMOM) programs.

SANITARY SYSTEM OVERFLOWS (SSOs)

The following location(s) have been identified as potential sources for SSOs:

Lift Station #1 – 4th Street and 2nd Avenue South

Lift Station #2 – 3rd Street and 1st Avenue North

Lift Station #3 - Oak Street and 9th Avenue North

Lift Station #4 - Elm Street and 15th Avenue North

INDUSTRIAL PRETREATMENT PROGRAM

The permittee's pretreatment program was approved in 1985 by the EPA Region 8, and it has subsequently incorporated significant modifications as approved by the Approval Authority. The pretreatment program is outlined in the Industrial Pretreatment Program section of this permit.

I. LIMITATIONS AND MONITORING REQUIREMENTS

A. Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge pollutants from the outfall as specified to the following: **Red River of the North.**

This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

B. Effluent Limitations and Monitoring

The permittee must limit and monitor all discharges as specified below:

Effluent Limitations and Monitoring Requirements Outfall 007 and 009 – Lagoons					
Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Biochemical Oxygen Demand (BOD ₅)	25 mg/l	45 mg/l	N/A	a	Composite
Temperature (°C)			Report	a	Grab
pH	Shall remain between 7.0 to 9.0 s.u.			a	Grab
Total Suspended Solids (TSS)	30 mg/l	45 mg/l	*	a	Composite
Escherichia coli (E. coli)	126/100 ml	*	409/100 ml	a, b	Grab
Oil & Grease °	*	*	10 mg/l	Daily	Visual
Nitrite Plus Nitrate, Total (as N)	Monitor only (mg/l)			1/month during discharge	Composite
Nitrogen, Kjeldahl, Total	Monitor only (mg/l)			1/month during discharge	Composite
Ammonia as N °	Refer to the Ammonia table below.			3/week during discharge	Composite
Phosphorus, Total (as P)	Average for the month	Monitor only (mg/l)	Monitor only (mg/l)	1/week during discharge	Composite
Phosphorus, Total (as P)	Average for the month	Monitor only (kg/day)	Monitor only (kg/day)	1/week during discharge	Calculated
Effluent Flow, MGD	*	*	Report Minimum and Max Daily Values	1/day	Instantaneous
Total Flow, mgal	*	*	Report Monthly Total	1/month	Calculated

Effluent Limitations and Monitoring Requirements Outfall 007 and 009 – Lagoons					
Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Whole Effluent Toxicity (WET) ^d	Part I.C			1/quarter	Grab
Metals, Total (App D; Table III) ^f	Influent and Effluent			1/year	Composite
Red River of the North Parameters - Collect same days as effluent ammonia as N.					
Flow (cfs) ^a			Report	3/week	Usable data source
pH (s.u.) ^a	Downstream		Report	3/week	Usable data source
Temperature (°C) ^a	Downstream		Report	3/week	Usable data source
Ammonia as N (mg/l)	Upstream		Report	3/week	Grab

Notes: Refer to Section VI – Industrial Wastewater Management for additional sampling requirements

- *. This parameter is not limited. However, the Department may impose limitations based on sample history and to protect the receiving waters.
- a. A pre-discharge sample must be taken prior to the start of any discharge. This analysis shall be reported to the department. A pre-discharge grab sample shall be tested for BOD5, TSS, pH, temperature, *E. coli*, and Ammonia as N. This pre-discharge sample shall represent the first week discharge sample. An additional grab sample of the actual discharge shall be taken and analyzed on a weekly basis for the duration of the discharge.
- b. *E. coli* shall not exceed 126 organisms per 100 milliliters (ml) as a geometric mean of representative samples collected during any 30-day consecutive period, nor shall more than 10 percent of samples collected during any 30-day consecutive period individually exceed 409 organisms per 100 ml. This limit applies from April 1 through October 31.
- c. If a visible sheen or floating oil is observed at the discharge point, an oil & grease sample shall be collected to determine compliance with the 10 milligrams per liter (mg/l) concentration limit.
- d. Acute static-renewal toxicity tests shall be conducted on separate grab samples quarterly from Outfalls 007 and 009 during discharge.
- e. Permittee will use Red River of the North parameters to calculate (refer to formula below) the real-time water quality standard for ammonia. This calculated limit will be compared to facility effluent data on ammonia, and if the effluent value is greater than the calculated limit, the permittee will report a violation.
- f. A total hardness of the receiving stream needs to be determined every time metals are sampled and analyzed. The hardness is used to calculate parameter criteria according to the state water quality standards. This sample shall be collected upstream of the final discharge sites.

Stipulations:

The discharge shall not contain, in sufficient amounts to be unsightly or deleterious, any floating debris, oil, scum, and other floating materials attributable to municipal wastewater operations.

Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to the discharge leaving city property or entering the receiving stream.

Ammonia Effluent Limitations – Outfalls 007 and 009

Average Monthly Ammonia as N Limitation: October – February

The 30-day average concentration of total ammonia (expressed as N in mg/l) does not exceed, more often than once every three years on the average, the numerical value given by the following formula; and the highest four-day average concentration of total ammonia within the 30-day averaging period does not exceed 2.5 times the numerical value given by the following formula:

$$\frac{(0.0577}{(1+10^{7.688-pH})} + \frac{2.487}{1+10^{pH-7.688}}) \cdot CV;$$

where CV = 4.63, when $T \leq 7^{\circ}\text{C}$; or
 $CV = 1.45 \cdot 10^{0.028 \cdot (25-T)}$, when $T > 7^{\circ}\text{C}$.

Receiving stream pH is used for the calculation

Average Monthly Ammonia as N Limitation: March - September

The 30-day average concentration of total ammonia (expressed as N in mg/l) does not exceed, more often than once every three years on the average, the numerical value given by the following formula; and the highest four-day average concentration of total ammonia within the 30-day averaging period does not exceed 2.5 times the numerical value given by the following formula:

$$\frac{(0.0577}{(1+10^{7.688-pH})} + \frac{2.487}{1+10^{pH-7.688}}) \cdot CV;$$

where CV = 2.85, when $T \leq 14^{\circ}\text{C}$; or
 $CV = 1.45 \cdot 10^{0.028 \cdot (25-T)}$, when $T > 14^{\circ}\text{C}$.

Receiving stream pH is used for the calculation

Daily Maximum Limitation

For acute toxicity, the one-hour average concentration of total ammonia (expressed as N in mg/l) does not exceed, more often than once every three years on the average, the numerical value given by the following formula:

$$0.411/1 + 10^{7.204 - pH} + 58.4/1 + 10^{pH - 7.204},$$

where salmonids are absent

Receiving stream pH is used for the calculation

Note – For all above calculations, permittee receives ten percent of stream flow for dilution at time of discharge based on the flow of the Red River of the North. In-stream concentration will be calculated on a mass balance basis using the following formula:

In-stream concentration = $(Q_u \cdot C_u + Q_e \cdot C_e) / (Q_u + Q_e)$ where

Q_u = 10% of the Red River of the North Flow parameter

C_u = Red River of the North ammonia parameter

Q_e = Effluent flow parameter

C_e = Ammonia as N parameter

Outfalls 007 and 009 discharge will be regulated accordingly to avoid exceeding the water quality standard for ammonia as N at any time during the discharge period.

Effluent Limitations and Monitoring Requirements Outfall 010 – Mechanical Plant					
Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Biochemical Oxygen Demand (BOD ₅)(effluent)	25 mg/l	45 mg/l	N/A	3/week	Composite
Biochemical Oxygen Demand (BOD ₅)(influent)	Monitor only (mg/l)			1/week	Composite
Carbonaceous Biochemical Oxygen Demand (CBOD ₅) ^f	Monitor only (mg/l)			1/week	Composite
Temperature (°C)			Report	Daily	Grab
pH ^a	Shall remain between 7.0 to 9.0 s.u.			Daily	Grab
Total Suspended Solids (TSS) (effluent)	30 mg/l	45 mg/l	NA	3/week	Composite
TSS (influent)	N/A			1/week	Composite
Escherichia coli (E. coli) ^b	126/100 ml	*	409/100 ml	3/week	Grab
Oil & Grease ^c	*	*	10 mg/l	Daily	Visual
Total Residual Chlorine			0.10 mg/l	1/day	Grab
Effluent Flow, MGD	Report	*	Report Minimum and Max. Daily Value	1/day	Instantaneous
Nitrite Plus Nitrate, Total (as N)	Monitor only (mg/l)			1/month	Composite
Nitrogen, Kjeldahl, Total	Monitor only (mg/l)			1/month	Composite
Ammonia as N ^g	Refer to the Ammonia Table.			3/week	Composite
Phosphorus, Total (as P)	Average for the month	Monitor only (mg/l)	Monitor only (mg/l)	1/week	Composite
Phosphorus, Total (as P)	Average for the month	Monitor only (kg/day)	Monitor only (kg/day)	1/week	Calculated

Effluent Limitations and Monitoring Requirements Outfall 010 – Mechanical Plant					
Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Total Flow, mgal	Report	*	N/A	1/month	Calculated
Acute Whole Effluent Toxicity (WET) ^d	Refer to Part I.C.1 of permit			1/month	Grab
Chronic Whole Effluent Toxicity (WET) ^e	Refer to Part I.C.2 of permit			1/quarter	Grab
Metals, Total (App D; Table III) ^h	Influent and Effluent			1/quarter	Composite
Toxic Organics (App D; Table II)	Influent and Effluent			1/ every 2 years	Composite
Red River of the North Parameters – Collect same days as effluent ammonia as N.					
Flow (cfs)			Report	3/week	Usable data source
pH (s.u.)	Downstream		Report	3/week	Usable data source
Temperature (°C)	Downstream		Report	3/week	Usable data source
Ammonia as N (mg/l)	Upstream		Report	3/week	Grab
Notes: The Department may specify additional discharge conditions or restrictions at any time to maintain water quality standards. Refer to Section VI – Industrial Wastewater Management for additional sampling requirements					
* This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.					
a. A pH limitation of 7.0 – 9.0 with the exception that up to 10% of the representative samples collected during any three-year period may exceed this range, provided that lethal conditions are avoided.					
b. E. coli shall not exceed 126 organisms per 100 ml as a geometric mean of representative samples collected during any 30-day consecutive period, nor shall more than 10 percent of samples collected during any 30-day consecutive period individually exceed 409 organisms per 100 ml. This limit applies from April 1 through October 31.					
c. If a visible sheen or floating oil is observed at the discharge point, an oil & grease sample shall be collected to determine compliance with the 10 mg/l concentration limit.					
d. Acute static-renewal toxicity tests on both species shall be conducted on separate grab samples monthly from Outfall 010.					
e. At a minimum, the permittee shall conduct one chronic short-term toxicity test on both species from Outfall 010 once per calendar quarter.					
f. The city expressed interest in substituting CBOD5 for BOD5 from outfall 010. The secondary standard provides limitations based on CBOD5 as an alternative to BOD5 as specified in 40 CFR 133.102 (a)(1), (a)(2) and (a)(3). Samples shall be collected and reported during this permit cycle to provide support information should the city elect to adopt CBOD5 limits at a later date.					
g. Permittee will use Red River of the North parameters to calculate (refer to formula below) the real-time water quality standard for ammonia. This calculated limit will be compared to facility					

Effluent Limitations and Monitoring Requirements Outfall 010 – Mechanical Plant					
Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
<p>effluent data on ammonia and if the effluent value is greater than the calculated limit, the permittee will report a violation.</p> <p>h. A total hardness of the receiving stream needs to be determined every time metals are sampled and analyzed. The hardness is used to calculate parameter criteria according to the state water quality standards. This sample shall be collected upstream of the final discharge sites.</p> <p>Stipulations:</p> <p>The discharge shall not contain, in sufficient amounts to be unsightly or deleterious, any floating debris, oil, scum, and other floating materials attributable to municipal wastewater operations.</p> <p>Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to the discharge leaving city property or entering the receiving stream.</p>					

Ammonia Effluent Limitations – Outfalls 010

Average Monthly Ammonia as N Limitation: October - February

The 30-day average concentration of total ammonia (expressed as N in mg/l) does not exceed, more often than once every three years on the average, the numerical value given by the following formula; and the highest four-day average concentration of total ammonia within the 30-day averaging period does not exceed 2.5 times the numerical value given by the following formula:

$$\frac{(0.0577 + 2.487)}{(1+10^{7.688-pH} + 1+10^{pH-7.688})} \cdot CV;$$

where CV = 4.63, when $T \leq 7^{\circ}\text{C}$; or

CV = $1.45 \cdot 10^{0.028 \cdot (25-T)}$, when $T > 7^{\circ}\text{C}$.

Receiving stream pH is used for the calculation.

Average Monthly Ammonia as N Limitation: March - September

The 30-day average concentration of total ammonia (expressed as N in mg/l) does not exceed, more often than once every three years on the average, the numerical value given by the following formula; and the highest four-day average concentration of total ammonia within the 30-day averaging period does not exceed 2.5 times the numerical value given by the following formula:

$$\frac{(0.0577 + 2.487)}{(1+10^{7.688-pH} + 1+10^{pH-7.688})} \cdot CV;$$

where CV = 2.85, when $T \leq 14^{\circ}\text{C}$; or

CV = $1.45 \cdot 10^{0.028 \cdot (25-T)}$, when $T > 14^{\circ}\text{C}$.

Receiving stream pH is used for the calculation.

Daily Maximum Limitation

For acute toxicity, the one-hour average concentration of total ammonia (expressed as N in mg/L) does not exceed, more often than once every three years on the average, the numerical value given by the following formula:

$$0.411/1 + 10^{7.204 - pH} + 58.4/1 + 10^{pH - 7.204},$$

where salmonids are absent

Receiving stream pH is used for the calculation.

Note – For all above calculations, permittee receives ten percent of stream flow for dilution at time of discharge based on the flow of the Red River of the North. In-stream concentration will be calculated on a mass balance basis using the following formula:

In-stream concentration = $(Q_u \cdot C_u + Q_e \cdot C_e) / (Q_u + Q_e)$ where

Q_u = 10% of the Red River of the North Flow parameter

C_u = Red River of the North ammonia parameter

Q_e = Effluent flow parameter

C_e = Ammonia as N parameter

Outfall 010 discharge will be regulated accordingly to avoid exceeding the water quality standard for ammonia as N at any time during the discharge period.

C. Whole Effluent Toxicity (WET) Requirements

1. Acute Toxicity Testing

Acute toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms*, EPA-821-R-02-012 (Fifth Ed., October 2002). The permittee shall conduct an acute 48-hour static-renewal toxicity test using freshwater fleas, (*Ceriodaphnia dubia*) and an acute 96-hour static-renewal toxicity test using fathead minnows, (*Pimephales promelas*).

Outfalls 007 and 009

WET tests on both species shall be performed on the first discharge made each calendar year unless specifically waived by the Department. Thereafter, tests shall be performed on both species at least once every calendar month on both species in which there is a discharge. This requirement may be reduced upon the city requesting a reduction to toxicity testing – refer to the “Reduced Monitoring For Toxicity Testing” section below.

Outfall 010

WET tests shall be performed at least once per calendar month on both species. This requirement may be reduced upon the city requesting a reduction to toxicity testing – refer to the “Reduced Monitoring For Toxicity Testing” section below.

Acute test failure (LC50) is defined as lethality to 50 percent or more of the test organisms exposed to 100% effluent for *Ceriodaphnia dubia* 48-hour and fathead minnow 96-hour test. The 48-hour and 96-hour LC50 effluent value must be >100% or <1.0 TUa to indicate a passing test. Any 48-hour or 96-hour LC50 effluent value of <100% or >1.0 TUa will constitute a failure. Tests in which the control survival is less than 90 percent are invalid and must be repeated.

Acute WET requirements for Outfalls 007, 009, and 010

Effluent Dilution	0%(Control)	12.5%	25%	50%	75%	100%
Dilution Water	Red River of the North					
Species and Test Type	<i>Ceriodaphnia dubia</i> - 48 Hour Acute - Static Renewal - 20°C					
	Fathead minnow - 96 Hour Acute - Static Renewal - 20°C					
Endpoint	TUa					
Compliance Point	End-of-pipe					

If acute toxicity occurs in a routine test, an additional test shall be conducted within two weeks of the date of the initial sample. Should acute toxicity occur in the second test, testing shall be conducted at a frequency of once a month and the implementation of a **5.Toxicity Reduction Evaluation (TRE)** shall be determined by the department. Should there be no discharge during a specified sampling time frame, sampling shall be performed as soon as there is a discharge.

The permittee shall report the following results of each toxicity test on the DMR for that reporting period:

Pimephales promelas (fathead minnow)

If the lowest fathead minnow test value for percent effluent is less than 100% or greater than 1.0 TUa in 100% effluent, enter a “1”; otherwise, enter a “0” for Parameter No. TGN6C.

Report the highest TUa for fathead minnow, Parameter No. TSB6C.

***Ceriodaphnia dubia* (water flea)**

If the lowest *Ceriodaphnia dubia* test value for percent effluent is less than 100% or greater than 1.0 TUa in 100% effluent, enter a "1"; otherwise, enter a "0" for Parameter No. TGM3B.

Report the highest TUa for *Ceriodaphnia dubia*, Parameter No. TSA3B.

2. Chronic Toxicity Testing

The permittee shall conduct one chronic short-term toxicity test from Outfall 010 on both species once per calendar quarter on both species.

The chronic toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, EPA-821-R-02-013 (Fourth Ed., October 2002). Test species shall consist of freshwater fleas, (*Ceriodaphnia dubia*) and fathead minnows, (*Pimephales promelas*).

3. Reduced Monitoring For Toxicity Testing

a. Alternating Species

If the results of a minimum of four consecutive samples taken over at least a 12 month period indicate no toxicity, the permittee may request the department for a test reduction. This reduction would only be testing one species per sampling frequency. If fathead minnows are used first then the next test would be *C. dubia* or vice versa and continue alternating. The department may approve or deny the request, based on the biomonitoring results and other available information.

If toxicity occurs in any single species test, the provision for alternating species shall be immediately revoked and **Acute Toxicity Testing** and **Chronic Toxicity Testing** shall be followed in whole.

b. Monthly Testing

If the results of **5. Toxicity Reduction Evaluation (TRE)** have been accepted by the department or a period of time has indicated no toxicity, the permittee may request the department to allow a reduction from monthly to quarterly toxicity testing for both species. The department may approve or deny the request, based on the biomonitoring results and other available information.

4. Reporting Requirements

Test results shall be submitted with the DMR form for each reporting period. The format for the report shall be consistent with the above reference manual(s) as outlined in the section "Report Preparation and Test Review." Each lab generated report shall document the findings for each species reference toxicity testing chart.

5. Toxicity Reduction Evaluation (TRE)

If toxicity is detected, and it is determined by the Department that a TRE is necessary, the permittee shall be so notified and shall initiate a TRE immediately thereafter. A TRE shall reference the latest revision of *Technical Support Document for Water Quality-based Toxics Control*, EPA/505/2-90-001 – PB91-127415 (March 1991). The purpose of the TRE will be to establish the cause of the toxicity, locate the source(s) of the toxicity, and control or provide treatment for the toxicity.

If the TRE establishes that the toxicity cannot be eliminated by the current treatment system, the permittee shall submit a proposed compliance plan to the department. The plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control. If the approach and schedule are acceptable to the department, this permit may be reopened and modified.

If the TRE shows that the toxicity is caused by a toxicant(s) that may be controlled with specific

numerical limitations or proper discharge management as approved by the department, the permittee may:

- a. Submit an alternative control program for compliance with the numerical requirements; or
- b. If necessary, provide a modified biomonitoring protocol which compensates for the pollutant(s) being controlled numerically.

If acceptable to the department, this permit may be reopened and modified to incorporate any additional numerical limitations, a modified compliance schedule if judged necessary by the department, and/or a modified biomonitoring protocol.

Failure to conduct an adequate TRE or submit a plan or program as described above, or the submittal of a plan or program judged inadequate by the department, shall in no way relieve the permittee from maintaining compliance with the whole effluent toxicity requirements of this permit.

II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS

A. Representative Sampling (Routine and Non-Routine Discharges)

All samples and measurements taken shall be representative of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited under **Part I Effluent Limitations and Monitoring** requirements of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with **B. Test Procedures**. The permittee must report all additional monitoring in accordance with **D. Additional Monitoring**.

B. Test Procedures

The collection and transportation of all samples shall conform to EPA preservation techniques and holding times. All laboratory tests shall be performed by a North Dakota certified laboratory in conformance with test procedures pursuant to 40 CFR 136, unless other test procedures have been specified in this permit or approved by EPA as an alternate test procedure under 40 CFR 136.5. The method of determining the total amount of water discharged shall provide results within 10 percent of the actual amount.

C. Recording of Results

Records of monitoring information shall include the:

1. Date, exact place and time of sampling or measurements.
2. Name(s) of the individual(s) who performed the sampling or measurements.
3. Name of the laboratory.
4. Date(s) and time(s) analyses were performed.
5. Name(s) of the individual(s) who performed the analyses.
6. Analytical techniques or methods used.

7. Results of such analyses.

D. Additional Monitoring

If the discharge is monitored more frequently than this permit requires, all additional results, if in compliance with **B. Test Procedures**, shall be included in the summary on the DMR.

E. Reporting of Monitoring Results

Monitoring results shall be summarized and reported on DMR or forms. If no discharge occurs during a reporting period, "No Discharge" shall be reported. All reports must be postmarked by the last day of the month following the end of each reporting period. All original documents and reports required herein shall be signed and submitted to the department at the following address:

ND Department of Health
Division of Water Quality
918 East Divide Ave
Bismarck ND 58501-1947

F. Records Retention

All records and information (including calibration and maintenance) required by this permit shall be kept for at least three years or longer if requested by the department or EPA.

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

B. Proper Operation and Maintenance

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. If necessary to achieve compliance with the conditions of this permit, this shall include the operation and maintenance of backup or auxiliary systems.

C. Planned Changes

The department shall be given advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance. Any anticipated facility expansions, production increase, or process modifications which might result in new, different, or increased discharges of pollutants shall be reported to the department as soon as possible. Changes which may result in a facility being designated a "new source," as determined in 40 CFR 122.29(b), shall also be reported.

D. Duty to Provide Information

The permittee shall furnish to the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the department, upon request, copies of records required to be kept by this permit. When a permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or any report, it shall promptly submit such facts or information.

E. Signatory Requirements

All applications, reports, or information submitted to the department shall be signed and certified.

All permit applications shall be signed by a responsible corporate officer, a general partner, or a principal executive officer or ranking elected official.

All reports required by the permit and other information requested by the department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the department; and
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

If an authorization under **E. Signatory Requirements** is no longer accurate for any reason, a new authorization satisfying the above requirements must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

F. Twenty-four Hour Notice of Noncompliance Reporting

The permittee shall report any noncompliance which may endanger health or the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the EPA, Region VIII, Emergency Response Branch at 1.800.424.8802 and the State of North Dakota, Division of Homeland Security at 1.800.472.2121. The following occurrences of noncompliance shall be reported by telephone to the department at 701.328.5210 by the first workday (8:00 a.m.-5:00 p.m. Central time) after the day the permittee became aware of the circumstances:

1. Any lagoon cell overflow or any unanticipated bypass which exceeds any effluent limitation in the permit under **G. Bypass of Treatment Facilities**.
2. Any upset which exceeds any effluent limitation in the permit under **H. Upset Conditions**.
3. Violation of any daily maximum effluent or instantaneous discharge limitation for any of the pollutants listed in the permit.

A written submission shall also be provided within five days of the time that the permittee became aware of the circumstances. The written submission shall contain:

1. A description of the noncompliance and its cause.
2. The period of noncompliance, including exact dates and times.
3. The estimated time noncompliance is expected to continue if it has not been corrected.

4. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

Reports shall be submitted to the address in **Part II.E. Reporting of Monitoring Results**. The department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the department at 701.328.5210 as identified above.

All other instances of noncompliance shall be reported no later than at the time of the next DMR submittal. The report shall include the four items listed in this subsection.

G. Bypass of Treatment Facilities

Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to any of the following provisions in this section.

Bypass exceeding limitations-notification requirements.

1. **Anticipated Bypass.** If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of bypass.
2. **Unanticipated Bypass.** The permittee shall submit notice of an unanticipated bypass as required under **F. Twenty-four Hour Notice of Noncompliance Reporting**.

Prohibition of Bypass. Bypass is prohibited, and the department may take enforcement action against a permittee for bypass, unless:

1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
3. The permittee submitted notices as required under the **1. Anticipated Bypass** subsection of this section.

The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the three (3) conditions listed above.

H. Upset Conditions

An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of the following paragraph are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is considered final administrative action subject to judicial review.

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and the permittee can identify its cause(s).
2. The permitted facility was being properly operated at the time.
3. The permittee submitted notice of the upset as required under **F. Twenty-four Hour Notice of Noncompliance Reporting** and

4. The permittee complied with any remedial measures required under I. **Duty to Mitigate**.

In any enforcement proceeding, the burden of proof is on the permittee seeking to establish the occurrence of an upset has the burden of proof.

I. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee, at the department's request, shall provide accelerated or additional monitoring as necessary to determine the nature and impact of any discharge.

J. Removed Materials

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not be directly blended with or enter either the final plant discharge and/or waters of the state. The permit-issuing authority shall be contacted prior to the disposal of any sewage sludges. At that time, concentration limitations and/or self-monitoring requirements may be established.

K. Duty to Reapply

Any request to have this permit renewed should be made six months prior to its expiration date.

IV. GENERAL PROVISIONS

A. Inspection and Entry

The permittee shall allow department and EPA representatives, at reasonable times and upon the presentation of credentials if requested, to enter the permittee's premises to inspect the wastewater treatment facilities and monitoring equipment, to sample any discharges, and to have access to and copy any records required to be kept by this permit.

B. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the department and EPA. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

C. Transfers

This permit is not transferable except upon the filing of a Statement of Acceptance by the new party and subsequent department approval. The current permit holder should inform the new controller, operator, or owner of the existence of this permit and also notify the department of any possible change.

D. New Limitations or Prohibitions

The permittee shall comply with any effluent standards or prohibitions established under Section 306(a), Section 307(a), or Section 405 of the Act for any pollutant (toxic or conventional) present in the discharge or removed substances within the time identified in the regulations even if the permit has not yet been modified to incorporate the requirements.

E. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to water quality standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, changes in sewage sludge practices, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludges. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

F. Need to Halt or Reduce Activity Not a Defense

A defense indicating that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit will not be acceptable to an enforcement action.

G. State Laws

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation preserved under Section 510 of the Act.

H. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

J. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

V. INDUSTRIAL PRETREATMENT PROGRAM

Contributing Industries and Pretreatment Program Requirements

A. Standard Requirements

The permittee has been delegated primary responsibility for enforcing against discharges prohibited by 40 CFR 403.5 and applying and enforcing any national pretreatment standards established by the United States Environmental Protection Agency in accordance with Section 307 (b) and (c) of The CWA, as amended by The Water Quality Act of 1987

Permittee shall operate an industrial pretreatment program in accordance with the following permit requirements developed pursuant to Section 402(b)(8) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403), and the approved pretreatment program submitted by the permittee. The pretreatment program was approved on June 15, 1985 and has subsequently incorporated substantial modifications. The approved pretreatment program, and any approved modifications thereto, is hereby incorporated by reference and shall be implemented in a manner consistent with the following requirements:

1. Industrial user information shall be updated at a minimum of once per year or at that frequency necessary to ensure that all industrial users are properly permitted and/or controlled. The records shall be maintained and updated as necessary.

2. In accordance with 40 CFR 122.44(j)(1), identify, in terms of character and volume of pollutants, any SIUs discharging into the POTW subject to pretreatment standards under section 307(b) of the CWA and 40 CFR part 403.
3. The permittee shall sample and inspect each Significant Industrial User (SIU) at least once per calendar year (40 CFR Section 403.8(f)(2)(v)). This is in addition to any industrial self-monitoring activities. If the permittee performs sampling for any SIU, then the permittee shall perform any repeat sampling and analysis within 30 days of becoming aware of the violation (40 CFR Section 403.12(g)(2)).
4. The permittee shall evaluate whether each SIU needs a plan to control slug discharges. SIUs must be evaluated within one year of being designated an SIU. Where needed, the permittee shall require the SIU to prepare or update, and then implement the plan. Where a slug prevention plan is required, the permittee shall ensure that the plan contains at least the minimum elements required in 40 CFR Section 403.8(f)(2)(vi). If required, the permittee shall incorporate slug control requirements into the control mechanism for the SIU. (40 CFR, Section 403.8(f)(1)(iii)(B)(6)).
5. The permittee shall investigate instances of non-compliance with pretreatment standards and requirements indicated in reports and notices required under 40 CFR 403.12, or indicated by analysis, inspection, and surveillance activities.
6. The permittee shall enforce all applicable pretreatment standards and requirements and obtain remedies for noncompliance by any industrial user.
7. The permittee shall control, through the legal authority in the approved pretreatment program, the contribution to the POTW by each industrial user to ensure compliance with applicable pretreatment standards and requirements. In the case of industrial users identified as significant under 40 CFR Section 403.3(v), this control shall be achieved through permit, order, or similar means and shall contain, at a minimum, the following conditions:
 - a. Statement of duration (in no case more than five years).
 - b. Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator.
 - c. Effluent limits based on applicable pretreatment standards, categorical pretreatment standards, local limits, and state and local law.
 - d. Self-monitoring, sampling, reporting, notification, and record-keeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in 40 CFR 403, categorical pretreatment standards, local limits, and state and local law.
 - e. Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond deadlines mandated by federal statute or regulation.
 - f. Requirements to control slug discharges, if determined by the POTW to be necessary.
8. The permittee shall provide adequate staff, equipment, and support capabilities to carry out all elements of the pretreatment program as required by 40 CFR Section 403.8(f)(3);

9. The approved program shall not be substantially modified by the permittee without the approval of the approval authority. Substantial and non-substantial modifications shall follow the procedures outlined in 40 CFR Section 403.18.
10. The permittee shall develop, implement, and maintain an enforcement response plan as required by 40 CFR Section 403.8(f)(5).
11. The permittee shall notify all industrial users of the users' obligations to comply with applicable requirements under Subtitles C and D of the Resource Conservation and Recovery Act (RCRA) as required by 40 CFR Section 403.8(f)(2)(iii).
12. The permittee shall establish, where necessary, legally binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements by industrial users within these jurisdictions. These legally binding agreements must identify the agency responsible for the pretreatment implementation and enforcement activities in the contributing jurisdictions and outline the specific roles, responsibilities, and pretreatment activities of each jurisdiction.

B. Local Limits

The permittee shall prohibit the introduction of the following pollutants into the POTW:

1. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limit to, waste streams with a closed cup flashpoint of less than 60 degrees Centigrade (140 degrees Fahrenheit) using the test methods specified in 40 CFR Section 261.21.
2. Pollutants which will cause corrosive structural damage to the POTW, but in no case, discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges.
3. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, or other interference with the operation of the POTW.
4. Any pollutant, including oxygen-demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.
5. Heat in amounts which will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the approval authority, upon request of the POTW, approves alternate temperature limits upon request of the POTW.
6. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.
7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems.
8. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
9. Any specific pollutant that exceeds a local limitation established by the POTW in accordance with the requirements of 40 CFR Section 403.5(c) and (d).
10. Any pollutant which may cause pass through or interference.

The permittee shall establish and enforce specific local limits to implement the provisions of 40 CFR sections 403.5(a) and (b), as required by 40 CFR Section 403.5(c). The permittee shall continue to develop these limits as necessary and effectively enforce such limits.

1. In accordance with 40 CFR 122.44(j)(2)(ii), a technical evaluation of the need to develop or revise local limits shall be submitted to the Approval Authority within twelve months of the effective date of this permit.
2. This evaluation should be conducted in accordance with EPA's *"Local Limits Development Guidance"* July 2004. Where the permittee determines that revised or new local limits are necessary, the permittee shall submit the proposed local limits to the Approval Authority in an approvable form in accordance with 40 CFR 403.18.

C. Sampling and Reporting Requirements

The permittee shall analyze the treatment facility influent and effluent for the presence of the toxic pollutants listed in 40 CFR Part 122 Appendix D (NPDES Application Testing Requirements) Table II and the toxic pollutants in Table III as follows:

	Minimum Frequency of Monitoring
Table II Priority Pollutants 40 CFR 122 Appendix D	1 every other year
Table III Metals 40 CFR 122 Appendix D	1/quarter

40 CFR 122 Appendix D Table III				
Antimony, Total	Arsenic, Total	Beryllium, Total	Cadmium, Total	Chromium,
Copper, Total	Lead, Total	Mercury, Total	Nickel, Total	Selenium, Total
Silver, Total	Thallium,	Zinc, Total	Cyanide, Total	Phenols, Total
Hardness, Total ^a				
Notes:				
a. A total hardness of the receiving stream needs to be determined every time the above parameters are tested. The hardness is used to calculate parameter criteria according to the North Dakota water quality standards.				

If, based upon information available to the permittee, there is reason to suspect the presence of any toxic or hazardous pollutant listed in Table V, or any other pollutant in a quantity or concentration known or suspected to adversely affect POTW operation, receiving water quality, or solids disposal procedures, analysis for those pollutants shall be performed on both the influent and the effluent as follows:

	Minimum Frequency of Monitoring
Table V Other Toxics	Conditional as specified above

1. Along with the permittee's pretreatment annual report, the permittee will submit a list of compounds included in Table V that are suspected or known to be present in its influent wastewater. This determination shall be based on a review of the permittee's pretreatment program records. The state permitting authority and/or approval authority may review and comment on the list and the list may be revised if, in the opinion of the state permitting authority and/or approval authority, the list is incomplete. The permittee will perform the analysis on the influent for the revised list of compounds for which there are acceptable testing procedures as follows:

	Minimum Frequency of Monitoring
Revised List of Compounds	0/Year

2. Where the pollutants monitored in accordance with this section are reported as being above the method detection limit, the results for these pollutants shall be reported in the permittee's pretreatment annual report, if required by EPA.

D. Sludge Sampling and Reporting Requirements

Prior to disposal, the permittee shall analyze the treatment facility sludge (biosolids) prior to disposal, for the presence of toxic pollutants listed in 40 CFR 122 Appendix D (NPDES Application Testing Requirements) Table III at least once per year. If the permittee does not dispose of biosolids during the calendar year, the permittee shall certify to that in the pretreatment annual report and the monitoring requirements in this paragraph shall be suspended for that calendar year.

1. The permittee shall review the pollutants in 40 CFR Part 122, Appendix D, Tables II and V. If any of the pollutants in these tables were above detection in the influent samples during the previous two years or the last two analyses, whichever is greater, the permittee shall sample and analyze its sewage sludge for these pollutants. The permittee shall perform this evaluation and analysis at least once per year.
2. The permittee shall use sample collection and analysis procedures as approved for use under 40 CFR Part 503 or specified in the EPA Region 8 General Permit for biosolids.
3. The permittee shall report the results for these pollutants in the permittee's pretreatment annual report as required.

E. Sample Analysis and Sampling Procedure

All analyses shall be in accordance with procedures established in 40 CFR Part 136. Where sampling methods are not specified, the influent and effluent samples collected shall be composite samples consisting of at least twelve (12) aliquots collected at approximately equal intervals over a representative 24-hour period and composited according to flow. Where automated composite sampling is inappropriate, at least four (4) grab samples shall be manually taken at equal intervals over a representative 24-hour period, and composited prior to analysis using approved methods. Alternatively, the individual grab samples may be analyzed separately and the results from the respective grab samples mathematically combined based on flow (i.e., flow weighted) for the final result.

F. Additional Sampling Requirements

In addition, the following are identified as pollutants of concern by sampling and analysis of your influent, effluent and/or sludge during local limits development, other chemical monitoring, or through activities associated with or as a result of whole effluent toxicity testing. The following pollutants of concern shall be sampled and analyzed in the influent and effluent as follows:

Parameters	Minimum Frequency of Monitoring
No additional parameters have been identified at this time.	

G. Annual Reporting Requirements

The permittee shall prepare annually a list of industrial users, which during the preceding twelve (12) months have significantly violated pretreatment standards or requirements. This list is to be published annually in a newspaper of general circulation in the permittee's service area as required by 40 CFR Section 403.8(f)(2)(viii).

In addition, on or before March 28, the permittee shall submit a pretreatment program annual report to the approval authority and the state permitting authority that contains the information requested by EPA, or at a minimum the following information:

1. An updated list of all SIUs as defined at 40 CFR Section 403.3(v). For each SIU listed, the following information shall be included:
 - a. All applicable Standard Industrial Classification (SIC) codes and categorical determinations, as appropriate, and a brief description of the industry and general activities.
 - b. Permit status, for example, whether any SIU has an unexpired control mechanism and an explanation as to why the SIU is operating without a current, unexpired control mechanism (e.g., permit).
 - c. A summary of all monitoring activities performed within the previous twelve (12) months. The following information shall be reported.

Total number of SIUs inspected; and
Total number of SIUs sampled.

2. For all industrial users that were in Significant Noncompliance during the previous twelve (12) months, provide the name of the violating industrial user; indicate the nature of the violations; the type and number of actions taken (administrative order, criminal or civil suit, fines or penalties collected, etc.) and current compliance status. Indicate if the company returned to compliance and the date compliance was attained. Determination of Significant Non-Compliance shall be performed as defined at 40 CFR Section 403.8(f)(2)(viii)(A-H).
3. A summary of all enforcement actions not covered by the paragraph above conducted in accordance with the approved Enforcement Response Plan, as required in 40 CFR Section 403.8(f)(5).
4. A list of all SIUs for which authorization to discharge was terminated or revoked during the preceding twelve (12) month period and the reason for termination.
5. A report on any interference, pass through, upset or NPDES permit violations known or suspected to be caused by non-domestic discharges of pollutants and actions taken by the permittee in response.
6. Verification of publication of industrial users in Significant Noncompliance.
7. Identification of the specific locations, if any, designated by the permittee for receipt (discharge) of trucked or hauled waste, if modified.
8. Information as required by the approval authority or state permitting authority about the discharge to the POTW from the following activities:
 - a. Ground water clean-up from underground storage tanks
 - b. Trucked or hauled waste; and
 - c. Ground water clean-up from RCRA or Superfund sites
9. A description of all changes made during the previous calendar year to the permittee's pretreatment program that were not submitted as substantial or non-substantial modifications to EPA.
10. The permittee shall evaluate actual pollutant loadings against the approved Maximum Allowable Headworks Loadings (MAHLs). Where the actual loading exceeds the MAHL, the permittee shall immediately begin a program to either revise the existing local limit and/or undertake such other

studies as necessary to evaluate the cause(s) of the excursion. The permittee shall provide a summary of its intended action.

11. Other information that may be deemed necessary by the approval authority.

H. Notification Requirements

The permittee shall provide the pretreatment approval authority with adequate notice of any substantial change in the volume or character of pollutants being introduced into the treatment works by any SIU at the time of application for the discharge permit. For the purposes of this section, "substantial change" shall mean a level of change which has a reasonable probability of affecting the permittee's ability to comply with its permit conditions or to cause a violation of stream standards applied to the receiving water.

Adequate notice shall include information on: (1) the quality and quantity of effluent to be introduced into the treatment works, and (2) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

I. Enforcement Actions

Section 309(f) of the Act provides that EPA may issue a notice to the POTW stating that a determination has been made that appropriate enforcement action must be taken against an industrial user for noncompliance with any pretreatment standards and requirements. The notice provides the POTW with 30 days to commence such action. The issuance of such permit notice shall not be construed to limit the authority of the permit issuing authority or approval authority.

J. Enforcement Authority

The state permitting authority and/or the EPA retains, at all times, the right to take legal action against the industrial contributor for violations of a permit issued by the permittee, violations of any pretreatment standard or requirement, or for failure to discharge at an acceptable level under national standards issued by EPA under 40 CFR, chapter I, subchapter N. In those cases where a NPDES permit violation has occurred because of the failure of the permittee to properly develop and enforce pretreatment standards and requirements as necessary to protect the POTW, the state permitting authority and/or approval authority shall hold the permittee responsible and may take legal action against the permittee as well as the indirect discharger(s) contributing to the permit violation.